

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education
Advanced Subsidiary Level and Advanced Level

## ACCOUNTING

Paper 4 Problem Solving (Supplementary Topics)

Additional Materials: Answer Booklet/Paper

## READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet. Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black pen.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.
Answer all questions.
All accounting statements are to be presented in good style.
International accounting terms and formats should be used as appropriate.
Workings should be shown.
You may use a calculator.
At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of $\mathbf{7}$ printed pages and $\mathbf{1}$ blank page.

1 Prescott, Rohini and Singh have been in partnership for many years with a profit sharing ratio of 2: 2: 1. Their statement of financial position (balance sheet) at 30 June 2011 was as follows:

## Prescott, Rohini and Singh <br> Statement of Financial Position (Balance Sheet) at 30 June 2011

|  |  | \$ | \$ |
| :---: | :---: | :---: | :---: |
| Non-current assets |  |  |  |
| Land and buildings |  | 100000 |  |
| Fixtures and fittings |  | 34500 |  |
| Motor vehicles |  | 16750 | 151250 |
| Current assets |  |  |  |
| Inventories |  | 23500 |  |
| Trade receivables |  | 14850 |  |
| Bank |  | 7595 |  |
|  |  | 45945 |  |
| Current liabilities |  |  |  |
| Trade payables |  | 9450 | 36495 |
|  |  |  | 187745 |
| Non-current liabilities |  |  |  |
| Loan from Prescott at 12\% |  |  | (25000) |
|  |  |  | $\underline{\underline{162745}}$ |
| Financed by: |  |  |  |
| Capital Accounts | 70345 |  |  |
|  | 54250 |  |  |
|  | 38150 |  | $\underline{\underline{162745}}$ |

The partners sold their business to Ashburton Ltd on 1 July 2011 for $\$ 215$ 000. Ashburton Ltd took over all of the assets and liabilities except the bank account.

The purchase consideration was satisfied by:
1 The issue of 100000 ordinary shares of $\$ 1$ at a premium of $\$ 0.50$.
2 The issue of $8 \%$ debentures redeemable at par in 2020 to Prescott to ensure that he receives the same amount of annual interest that he received from the loan.

3 The balance was paid by cash.
On 1 July 2011 the partnership assets were revalued as follows:

|  | $\$$ |
| :--- | ---: |
| Land and buildings | 115000 |
| Fixtures and fittings | 32000 |
| Motor vehicles | 15000 |
| Inventories | 22000 |
| Trade receivables | 13500 |

Ashburton Ltd's statement of financial position (balance sheet) at 30 June 2011 was as follows:

## Ashburton Ltd

Statement of Financial Position (Balance Sheet) at 30 June 2011

## \$ <br> \$

## Non-current assets

Land and buildings 125000
Fixtures and fittings 67750
Motor vehicles 24975
217725

## Current assets

Inventories 22875
Trade receivables 14363
Bank 28462

- 65700

Current liabilities
Trade payables
14630
51070
268795
Financed by:
Ordinary shares of \$1 200000
Share premium 20000
Retained profit $\quad 48795$
268795

## REQUIRED

(a) Prepare Ashburton Ltd's statement of financial position immediately after the acquisition of the partnership

An extract from Ashburton Ltd's income statement (profit and loss account) for the year ended 30 June 2011 is shown below:

|  | $\$$ |
| :--- | :---: |
| Revenue | 385746 |
| Cost of sales | 246328 |
| Gross profit | 139418 |
| Expenses | $\mathbf{1 0 1 9 2 5}$ |
| Operating profit | 9793 |
| Taxation | 28217 |
| Profit after taxation | $\underline{10000}$ |
| Dividend paid | $\underline{18217}$ |
| Retained profit for the year |  |

Following the acquisition of the partnership Ashburton Ltd anticipate that:
1 the revenue will increase by $60 \%$
2 cost of sales will increase by $40 \%$
3 expenses will increase by $35 \%$.
The projected taxation liability will be $\$ 33500$ and the dividend per share will remain unchanged.

## REQUIRED

(b) Prepare a forecast income statement (profit and loss account) for Ashburton Ltd for the year ending 30 June 2012.
(c) Calculate the earnings per share for the year ended 30 June 2011 and the forecast earnings per share for the year ending 30 June 2012.
[Total: 40]

2 Sabrina plc has been trading for many years as a worldwide supplier of office equipment. The summarised accounts prepared for internal purposes for 2011 and 2010 are set out below.

Sabrina plc
Income Statement for the year ended 30 June
$2011 \quad 2010$

| Revenue | 2546 | 1458 |
| :---: | :---: | :---: |
| Cost of sales | 981 | 512 |
| Gross profit | 1565 | 946 |
| Depreciation | 786 | 384 |
| Other expenses | 108 | 84 |
| Profit on disposal of non-current assets | 15 | 8 |
| Operating profit | 686 | 486 |
| Interest | 225 | 80 |
|  | 461 | 406 |
| Taxation | 103 | 94 |
| Profit after taxation | 358 | 312 |
| Dividends | 160 | 80 |
| Retained profit for year | 198 | 232 |
| Retained profit b/f | 821 | 589 |
| Retained profit c/f | $\underline{\underline{1019}}$ | 821 |

## Sabrina plc Statement of Financial Position (Balance Sheet) at 30 June

|  | $\begin{aligned} & 2011 \\ & \$ 000 \end{aligned}$ | $\begin{aligned} & 2010 \\ & \$ 000 \end{aligned}$ |
| :---: | :---: | :---: |
| Non-current assets | 5214 | 2576 |
| Current assets |  |  |
| Inventories | 441 | 227 |
| Trade receivables | 639 | 361 |
| Bank | - | 78 |
|  | $\overline{1080}$ | 666 |
| Current liabilities |  |  |
| Trade payables | 347 | 287 |
| Dividends | 80 | 40 |
| Taxation | 103 | 94 |
| Bank | 195 | - |
|  | 725 | 421 |
| Working capital | 355 | 245 |
| Non current liabilities |  |  |
| 8\% Debentures (2020) | 2500 | 1000 |
|  | $\underline{\underline{3069}}$ | $\underline{\underline{1821}}$ |
| Capital and reserves |  |  |
| Ordinary share capital | 2000 | 1000 |
| Share premium | 50 | - |
| Retained earnings | 1019 | 821 |
|  | $\underline{\underline{3069}}$ | $\underline{\underline{1821}}$ |

Note:
1 All sales and purchases are made on credit.
2 Non-current assets costing $\$ 40000$, with accumulated depreciation of $\$ 25000$, were sold during the year.

## REQUIRED

(a) Prepare a reconciliation between cash flows from operating activities and operating profit for the year ended 30 June 2011.
(b) Prepare a cash flow statement for the year ended 30 June 2011 in accordance with IAS 7.

The directors are concerned about the bank overdraft and are seeking a bank loan. The bank asks for some financial information.

## REQUIRED

(c) Calculate the following ratios for both years, 2011 and 2010.
(i) Return on equity
(ii) Trade receivables collection period (turnover) (in days)
(iii) Trade payables payment period (turnover) (in days)
(iv) Income gearing
(v) Gearing ratio.
(d) Based on these ratios, state whether the bank is likely to give a loan to Sabrina plc. Give three reasons for your answer.

3 Bradley Ltd is considering investing in a project which requires an initial outlay of $\$ 800000$.
A net cash inflow of $\$ 235000$ is expected at the end of the first year and this is expected to rise by $10 \%$ annually until the end of year 4 . The project is fully complete and has no residual value at the end of year 5 and the anticipated net cash inflow at this time is just $20 \%$ of the initial investment.

The company's cost of capital is $8 \%$.
Extracts from present value tables for $\$ 1$

| Year | $8 \%$ | $15 \%$ |
| :---: | :---: | :---: |
| 1 | 0.926 | 0.870 |
| 2 | 0.857 | 0.756 |
| 3 | 0.794 | 0.658 |
| 4 | 0.735 | 0.572 |
| 5 | 0.681 | 0.497 |

## REQUIRED

(a) Calculate the net present value (NPV) of the project at the company's cost of capital and advise the directors whether the project is acceptable.
(b) Determine the discounted payback period.
(c) Explain briefly what you understand by the internal rate of return (IRR) of a project.
(d) Calculate the IRR of the project.
(e) Identify four other factors other than NPV which may be used to determine the acceptability of the project.
[Total: 40]

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